

In the Claims:

Please substitute the following clean copy text for the pending claims of the same number.

1. A method for forming an ohmic contact on a semiconductor layer comprising:
 - (a) depositing a reactive layer comprising at least one electrically conductive material on at least a portion of a compound semiconductor layer, wherein the at least one electrically conductive material is chosen from nickel, ruthenium, vanadium, gold, and cobalt; and
 - (b) depositing a refractory layer comprising electrically conductive material on the reactive layer, wherein said refractory layer is substantially free of gold, and wherein additional overlayers of conductive metal are not necessary in the ohmic contact.
21. An ohmic contact to a compound semiconductor layer comprising:
 - (a) a reactive layer comprising at least one electrically conductive material, wherein the at least one electrically conductive material is chosen from nickel, ruthenium, vanadium, gold, and cobalt, and
 - (b) a refractory layer, wherein said refractory layer is substantially free of gold, and wherein additional overlayers of conductive metal are not necessary in the ohmic contact.
34. An ohmic contact to a compound semiconductor layer comprising:
 - (a) a reactive layer, said reactive layer is nickel; and
 - (b) a refractory layer, said refractory layer is titanium, wherein said refractory layer is substantially free of gold, and wherein additional overlayers of conductive metal are not necessary in the ohmic contact.

36. A method for forming an ohmic contact on a compound semiconductor layer of a semiconductor device comprising:

(a) depositing a reactive layer on at least a portion of a compound semiconductor layer of a semiconductor device, wherein the reactive layer is nickel and an adhesive element;

(b) depositing a refractory layer on said reactive layer, said refractory layer is titanium, wherein said refractory layer is substantially free of gold, and wherein additional overlayers of conductive metal are not necessary in the ohmic contact.

Please add the following new claims:

65. (Newly Added) The method of claim 1, wherein the semiconductor layer is N+ InGaAs.
66. (Newly Added) The method of claim 21, wherein the semiconductor layer is N+ InGaAs.
67. (Newly Added) The method of claim 34, wherein the semiconductor layer is N+ InGaAs.
68. (Newly Added) The method of claim 36, wherein the semiconductor layer is N+ InGaAs.